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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,332

12/15/2004

Volker Koch

18451

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272

7590

01/20/2006

SCULLY, SCOTT, MURPHY & PRESSER
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EXAMINER

LE, HOANGANH T

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/518,332

Applicant(s)

KOCH ET AL.

Examiner

HoangAnh T. Le

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


HoangAnh Le
Primary Examiner

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on December 06, 2005 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Hertel et al (the DE Patent No. 10136469A1, cited by Applicant, of record).

The Hertel et al reference teaches in figures 1-3 a combination antenna which is integrated into an unscrewable head fuse (11) of an item of artillery ammunition for frequencies which are to be processed in the region of the fuse (11) of a radar proximity fuse and a navigational satellite receiver, wherein a ring disc-shaped slot antenna (17) which is disposed transversely with respect to the fuse axis opens, respectively, radially outwardly through a conical wall of the fuse and inwardly into a resonator ring chamber (28) having an axial length which is substantially greater than the axial thickness of a slot (13) of the antenna, for operation in addition to the geometrically governed resonance frequency for navigational tasks, at a further resonance frequency for tasks of the radar proximity fuse, the further resonance frequency being determined by the dielectric of an electrically non-conducting hollow cylinder (29) which is introduced into the resonator ring chamber (28) in the absence of representing an integral multiple

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in relation to the navigational resonance frequency. The actual resonator ring chamber (28), a the antenna slot (13) which extends about the chamber and extending radially therefrom is also filled with a dielectric. Wherein integrally with the filling of the ring chamber (28) in the form of the hollow cylinder (29) is a flange-shaped collar (30) which extends thereabout and which extends radially as far as the conical peripheral wall surface of the fuse (11) through the slot (13). The collar (30) axially fills the slot (13) and terminates flush with the outside surface of the peripherally slit fuse wall (12). A frequency-dividing means leads from the slot antenna (17) to a transmitting-receiving unit of a radar fuse. A two-wire antenna cable is connected to at least two locations, which are disposed axially one in front of the other, at the inside edges of the slot (13), wherein four such connecting locations are provided at the corners of a notional square concentric with respect to the fuse axis and are brought together by a matching network to the standardized impedance of a coaxial line leading to the antenna amplifier. A dielectric disc (32) which serves as a wiring carrier for the network between the four mutually orthogonal connections to the inner end of the slot (13) which is faces towards the ring chamber (28). There is provided with a circuit carrier disc (32) which has a network for bringing together a plurality of connecting locations disposed along an inner edge of the slot (13) to a wire of an antenna line (20). The inner edge of the slot (13) is formed by a hoop (35) which is inserted at an end face into one of the hollow-cylindrical walls (27, 31) of the ring chamber (28).

The limitation “ the resonance frequency being tuned to a radar frequency which is substantially higher than the carrier frequency of a navigational satellite system” is merely intended use, which fails to patentably distinguish the claims.

Response to Arguments

4. Applicant's arguments filed December 06, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that Hertel et al do not teach the resonance frequency being tuned to a radar frequency which is substantially higher than the carrier frequency of a navigational satellite system, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Since Hertel et al do show all claimed structure, including a ring disc-shaped slot antenna, a resonator ring chamber and an electrically non-conducting hollow cylinder, the 102 rejection is proper.

Conclusion

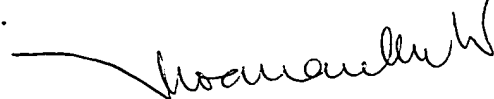
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HoangAnh Le
Primary Examiner